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| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | Application Number | 10/644,307 |
| | Filing Date | 08/20/2003 |
| | First Named Inventor | Mark Dennis Aler |
| | Art Unit | 3753 |
| | Examiner Name | John K Ford |
| | Attorney Docket No. | ITFT-PBG104US |
| Total Number of Pages in This Submission | | |

| ENCLOSURES (Check all that apply) | | |
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| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input checked="" type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Notice of Allowance; Notice of Draftperson's Patent Drawing Review (PTO-948) |
| Remarks: | | |

| SIGNATURE OF APPLICANT, ATTORNEY OR AGENT | | | |
|---|------------------------------|------------------|--------|
| Firm Name | RatnerPrestia | | |
| Signature | <i>Handwritten signature</i> | | |
| Printed Name | Joseph E. Maenner | | |
| Date | 2/1/2006 | Registration No. | 41,964 |

| CERTIFICATE OF TRANSMISSION / MAILING | | | |
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| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature | <i>Handwritten signature: Denise Morgan</i> | | |
| Typed or Printed Name | Denise Morgan | Date | 2/1/2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Office, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln. No: 10/644,307
Applicant: Mark Dennis Aler
Filed: 08/20/2003
Title: Fluid Heat Exchange Control System
TC/A.U.: 3753
Examiner: John K. Ford

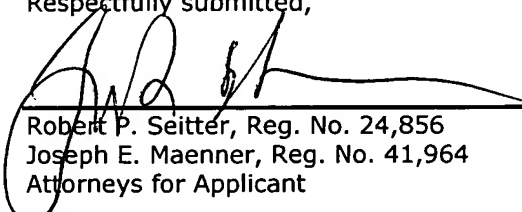
RESPONSE TO NOTICE OF ALLOWABILITY

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Notice of Allowability dated December 16, 2005, which state that corrected drawings must be submitted, enclosed are substitute drawings in compliance with 37 C.F.R. § 1.84.

Respectfully submitted,


Robert P. Seitter, Reg. No. 24,856
Joseph E. Maenner, Reg. No. 41,964
Attorneys for Applicant

RPS/JEM/dhm

Enclosures: (3) Sheets of Substitute Drawings
Notice of Allowance and Notice of Draftsperson's Patent Drawing Review (PTO-948)
Transmittal Form

Dated: February 1, 2006

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

The Director is hereby authorized to charge or credit Deposit Account No. 18-0350 for any additional fees, or any underpayment or credit for overpayment in connection herewith..

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to:
Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

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Form PTO-948 (Rev. 06/03)
Application No. 10/644307

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 8/20/03 are:

- A. approved by the Draftsperson under 37 CFR 1.84 or 1.152.
- B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. Corrected drawings are required.

| | |
|---|---|
| <p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink or Color (3 sets required). Color drawings are not acceptable until petition is granted. Fig(s) _____ Pencil and non black ink not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) One (1) full-tone set is required. Fig(s) _____ Photographs may not be mounted. 37 CFR 1.84(e) Photographs must meet paper size requirements of 37 CFR 1.84(f). Fig(s) _____ Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(e) Paper not flexible, strong, white, and durable. Fig(s) _____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: 21.0 cm by 29.7 cm (DIN size A4) or 21.6 cm by 27.9 cm (8 1/2x 11 inches) All drawing sheets not the same size. Sheet(s) _____ Drawings sheets not an acceptable size. Fig(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm Margins not acceptable. Fig(s) _____ Top (T) Left (L) Right (R) Bottom (B)</p> <p>6. VIEWS. 37 CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes, e.g., if Fig. 1 is changed to Fig. 1A, Fig 1B and Fig. 1C, etc., the specification, at the Brief Description of the Drawings, must likewise be changed. Views not labeled separately or properly. Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3) Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p> | <p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l) Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) _____</p> <p>11. SHADING. 37 CFR 1.84(m) Solid black areas pale. Fig(s) _____ Solid black shading not permitted. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p) <input checked="" type="checkbox"/> Numbers and reference characters not plain and legible. Fig(s) <u>1-3</u> Figure legends are poor. Fig(s) _____ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s) _____ Numbers, letters and reference characters must be at least 32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3). Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t) Sheets not numbered consecutively, and in Arabic numbers beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. DESIGN DRAWINGS. 37 CFR 1.152 Surface shading shown not appropriate. Fig(s) _____ Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Fig(s) _____</p> |
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COMMENTS:

Reviewer Jointed
If you have questions, call (703) 305-8404.

Date 12/08/05
Attachment to Paper No. 12092005



Notice of Allowability

| | | |
|-----------------|--------------|--|
| Application No. | Applicant(s) | |
| 10/644,307 | ALER ET AL. | |
| Examiner | Art Unit | |
| John K. Ford | 3753 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- ☒ This communication is responsive to communication of Sept 26, 2005.
- ☒ The allowed claim(s) is/are 1-9.
- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - ☐ All
 - ☐ Some*
 - ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

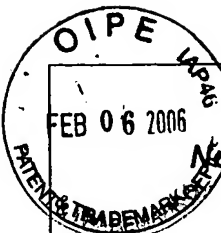
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 08/20/03.
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
- ☒ Examiner's Amendment/Comment
- ☐ Examiner's Statement of Reasons for Allowance
- ☐ Other _____.



Notice of References Cited

| | | | |
|---------------------------------------|--|---|-------------|
| Application/Control No. 10/644,307 | | Applicant(s)/Patent Under Reexamination ALER ET AL. | |
| Examiner John K. Ford | | Art Unit 3753 | Page 1 of 2 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|--------------------|----------------|
| * | A | US-2004/0026075 | 02-2004 | Park et al. | 165/218 |
| * | B | US-2003/0037919 | 02-2003 | Okada et al. | 165/206 |
| * | C | US-6,666,042 | 12-2003 | Cline et al. | 62/175 |
| * | D | US-6,449,969 | 09-2002 | Fujimoto et al. | 62/180 |
| * | E | US-5,946,926 | 09-1999 | Hartman, Thomas B. | 62/201 |
| * | F | US-5,540,555 | 07-1996 | Corso et al. | 417/44.2 |
| * | G | US-5,425,503 | 06-1995 | Corso, Anthony B. | 237/63 |
| * | H | US-5,318,106 | 06-1994 | Dorini et al. | 165/292 |
| * | I | US-5,316,384 | 05-1994 | Corso, Anthony B. | 366/338 |
| * | J | US-5,309,727 | 05-1994 | Duff et al. | 62/117 |
| * | K | US-5,301,513 | 04-1994 | Duff et al. | 62/117 |
| * | L | US-5,195,329 | 03-1993 | Lewis et al. | 62/117 |
| * | M | US-5,138,845 | 08-1992 | Mannion et al. | 62/99 |

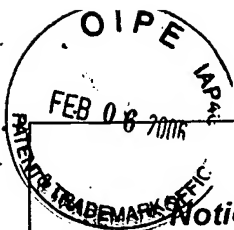
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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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| | X | |

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**Notice of References Cited**

Application/Control No.

10/644,307

Applicant(s)/Patent Under
Reexamination
ALER ET AL.

Examiner

John K. Ford

Art Unit

3753

Page 2 of 2

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|-----------------------|----------------|
| * | A | US-5,070,704 | 12-1991 | Conry, Ronald D. | 62/175 |
| * | B | US-4,483,152 | 11-1984 | Bitondo, James M. | 62/175 |
| * | C | US-4,463,574 | 08-1984 | Spethmann et al. | 62/175 |
| * | D | US-4,210,957 | 07-1980 | Spethmann, Donald H. | 700/276 |
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| * | F | US-3,729,051 | 04-1973 | Mannion et al. | 165/246 |
| * | G | US-3,202,208 | 08-1965 | LUDWIG GEIRINGER PAUL | 165/219 |
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| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known

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|----------------------|------------------|
| Application Number | To Be Assigned |
| Filing Date | Herewith |
| First Named Inventor | Mark Dennis Aler |
| Art Unit | To Be Assigned |
| Examiner Name | To Be Assigned |
| Attorney Docket No. | ITFT-PBG104US |

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|--|-------------------------------|---|---|
| | | Number - Kind Code ² (if known) | | | |
| | | US-6,390,780 B1 | 05/21/2002 | Batchelder et al. | entire document |
| | | US-6,311,504 B1 | 11/06/2001 | Yamazaki et al. | entire document |
| | | US-6,293,757 B1 | 09/25, 2001 | Oda et al. | entire document |
| | | US-6,220,043 B1 | 04/24/2001 | Chaney, Jr. et al. | entire document |
| | | US-6,212,894 B1 | 04/10/2001 | Brown et al. | entire document |
| | | US-6,176,306 B1 | 01/23/2001 | Gault | entire document |
| | | US-6,018,959 | 02/01/2000 | Schmidt | entire document |
| | | US-5,910,158 | 06/08/1999 | Park | entire document |
| | | US-5,707,221 | 01/13/1998 | Wiltrisch | entire document |
| | | US-5,626,287 | 05/06/1997 | Krause et al. | entire document |
| | | US-5,605,053 | 02/25/1997 | Otori | entire document |
| | | US-5,551,249 | 09/03/1996 | Van Steenburgh, Jr. | entire document |
| | | US-5,491,982 | 02/20/1996 | Gowens | entire document |
| | | US-5,448,895 | 09/12/1995 | Coellner et al. | entire document |
| | | US-5,248,084 | 09/28/1993 | Latarius | entire document |
| | | US-5,190,215 | 03/02/1993 | Habermehl, Jr. et al. | entire document |
| | | US-5,170,936 | 12/15/1992 | Kubo et al. | entire document |
| | | US-5,090,872 | 02/25/1992 | Kuwabara et al. | entire document |
| | | US-5,056,712 | 10/15/1991 | Enck | entire document |
| | | US-4,603,556 | 08/05/1986 | Suefuji et al. | entire document |

FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
|--------------------|-----------------------|---|-------------------------------|---|---|--------------------------|
| | | Country Code ³ - Number ⁴ - Kind Code ⁵ (if known) | | | | |
| | | EP 1113231 A2 | 07/04/2001 | Walter E. Bujak | entire document | <input type="checkbox"/> |
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| Examiner Signature | John Ford | Date Considered | 12/05 |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

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| Application Number | To Be Assigned |
| Filing Date | Herewith |
| First Named Inventor | Mark Dennis Aler |
| Art Unit | To Be Assigned |
| Examiner Name | To Be Assigned |
| Attorney Docket No. | ITFT-PBG104US |

SHEET 2 of 2

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number Number - Kind Code ² (if known) | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|---|----------------------------------|--|---|
| | | US- 4,492,091 | 01/08/1985 | Whitwell et al. | entire document |
| | | US- 4,483,152 | 11/20/1984 | Bitondo | entire document |
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FOREIGN PATENT DOCUMENTS

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| Examiner Signature | John Ford | Date Considered | 12/05 |
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¹Applicant's unique citation designation number (optional).²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO :

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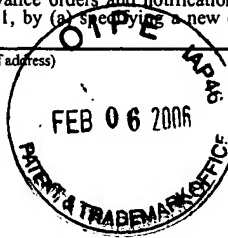
or **Fax**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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23122 7590 12/16/2005

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/644,307 | 08/20/2003 | Mark Dennis Aler | ITFT-PBG104US | 6030 |

TITLE OF INVENTION: FLUID HEAT EXCHANGE CONTROL SYSTEM

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1400 | \$300 | \$1700 | 03/16/2006 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|--------------|----------|----------------|
| FORD, JOHN K | 3753 | 165-219000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2
- _____ 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

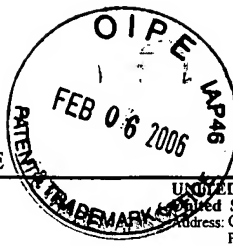
This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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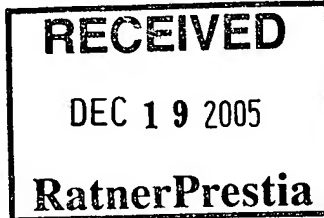
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NOTICE OF ALLOWANCE AND FEE(S) DUE

23122 7590 12/16/2005
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| | |
|-------------------------|--------------|
| EXAMINER | |
| FORD, JOHN K | |
| ART UNIT | PAPER NUMBER |
| 3753 | |
| DATE MAILED: 12/16/2005 | |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/644,307 | 08/20/2003 | Mark Dennis Aler | ITFT-PBG104US | 6030 |

TITLE OF INVENTION: FLUID HEAT EXCHANGE CONTROL SYSTEM

Formal Drawings + Issue + Pub Fees Due (3mo) 3-16-0

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1400 | \$300 | \$1700 | 03/16/2006 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

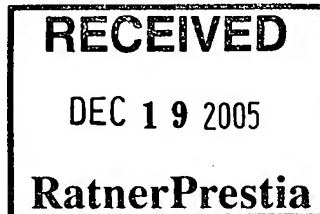


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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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VALLEY FORGE, PA 19482-0980



EXAMINER

FORD, JOHN K

ART UNIT PAPER NUMBER

3753

DATE MAILED: 12/16/2005

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 307 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 307 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Art Unit: 3753

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

This application is in condition for allowance except for the presence of claims 10-14 to an apparatus non-elected without traverse.

Accordingly, claims 10-14 been cancelled.

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.

A handwritten signature in black ink, appearing to be 'J. K. Ford', with a stylized, overlapping loop structure.

John K. Ford
Primary Examiner